

**REMARKS**

In the final Office Action, the Examiner rejects claims 1-78 under 35 U.S.C. § 103(a) as being unpatentable over Liddy et al. (U.S. Patent No. 6,026,388) in view of Hansen et al. (U.S. Patent Application Publication No. 2003/0014399); and objects to claim 34 for a minor informality.

By this Amendment, Applicants cancel claims 1-78 without prejudice or disclaimer and add new claims 79-117. No new matter is added. Claims 79-117 are pending.

Claims 1-78 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Liddy et al. in view of Hansen et al. Applicants submit that the rejection of claims 1-78 is rendered moot in view of the cancellation of claims 1-78.

Applicants submit that new claims 79-117 are patentable over Liddy et al. and Hansen et al.

For example, new independent claim 78 is directed to a method that includes storing search query-search document associations in a database, each search query-search document association representing a one-to-one pairing of an issued search query and a search document; receiving a search query; obtaining a set of search result documents using the received search query; and formulating a search query refinement suggestion based on at least one search result document and at least one search query-search document association in the database. This combination of features is not disclosed or suggested by Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination.

For example, Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, do not disclose or suggest that a search query-search document association that represents a one-to-one pairing of an issued search query and a search document. Because Liddy et al. and Hansen et al. do not disclose or suggest a search query-search document association that represents a one-to-one pairing of an issued search query and a search document, Liddy et al. and Hansen et al. cannot reasonably disclose formulating a search query refinement suggestion based on at least one search result document and at least one search query-search document association in the database, as further recited by claim 79.

For at least these reasons, claim 79 is believed to be patentable over Liddy et al. and Hansen et al.

New claims 80-93 depend from claim 79 and are believed to be, therefore, patentable over Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, for at least the reasons given above with respect to claim 79.

New independent claims 94 and 95 recite features similar to, yet possibly of different scope than, features recited in claim 79 and are believed to be, therefore, patentable over Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, for at least reasons similar to the reasons given above with respect to claim 79.

New independent claim 96, for example, is directed to a method that includes storing a plurality of query-document associations, each query-document association including a one-to-one pairing of an issued search query and a search document; receiving a search query; obtaining a set of search result documents using the received

search query; comparing the search result documents to stored search documents; identifying, for each stored search document that matches a search result document, a query-document association in the plurality of query-document associations; and formulating a search query refinement suggestion for the received search query based on the identified query-document associations. This combination of features is not disclosed or suggested by Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination.

For example, Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, do not disclose or suggest that a stored query-document association including a one-to-one pairing of an issued search query and a search document. Because Liddy et al. and Hansen et al. do not disclose or suggest a stored query-document association that includes a one-to-one pairing of an issued search query and a search document, Liddy et al. and Hansen et al. cannot reasonably disclose formulating a search query refinement suggestion for the received search query based on the identified query-document association, as further recited by claim 96.

For at least these reasons, claim 96 is believed to be patentable over Liddy et al. and Hansen et al.

New claims 97-110 depend from claim 96 and are believed to be, therefore, patentable over Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, for at least the reasons given above with respect to claim 96.

New independent claim 111 recites features similar to, yet possibly of different scope than, features recited in claim 96 and are believed to be, therefore, patentable over

Liddy et al., and Hansen et al., whether taken alone, or in any reasonable combination, for at least reasons similar to the reasons given above with respect to claim 96.

New independent claim 112, for example, is directed to a method including creating a query source reference; receiving a search query; and formulating a refinement suggestion for the received search query using the query source reference. The creating the query source reference includes identifying associations between issued search queries and retrieved search documents in a one-to-one relation, and assigning a weight to each of the associations. This combination of features is not disclosed or suggested by Liddy et al., and Hansen et al., whether taken alone, or in any reasonable combination.

For example, Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, do not disclose or suggest that creating a query source reference includes identifying associations between issued search queries and retrieved search documents in a one-to-one relation. Because Liddy et al. and Hansen et al. do not disclose or suggest that creating a query source reference includes identifying associations between issued search queries and retrieved search documents in a one-to-one relation, Liddy et al. and Hansen et al. cannot reasonably disclose formulating a refinement suggestion for the received search query using the query source reference, as further recited by claim 112.

For at least these reasons, claim 112 is believed to be patentable over Liddy et al. and Hansen et al.

New claims 113-115 depend from claim 112 and are believed to be, therefore, patentable over Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, for at least the reasons given above with respect to claim 112.

New independent claims 116 and 117 recite features similar to, yet possibly of different scope than, features recited in claim 112 and are believed to be, therefore, patentable over Liddy et al. and Hansen et al., whether taken alone, or in any reasonable combination, for at least reasons similar to the reasons given above with respect to claim 112.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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